

STEAM TURBINES

completely fill all available space. The serrations machined on the blade units and locking pieces register with the serrated grooves in the shaft and cylinder, so that caulking is not now relied upon for securing the blades in place. Moreover, the method of fixing depends very little on the skill of the workman, as was the case with the older type of fixing.

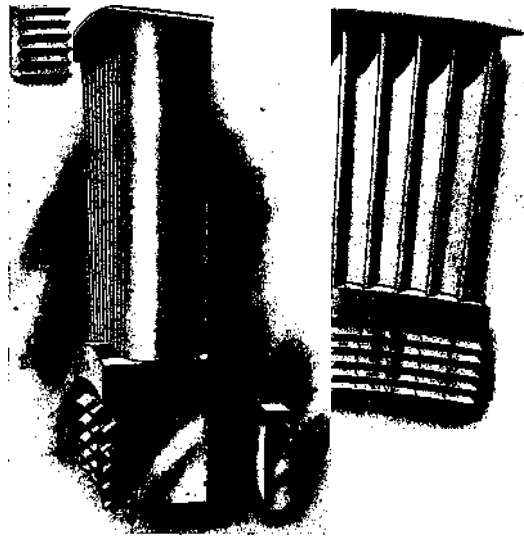


Fig. 14 Parsons " End-tightening
Blading "

Fig. 15

The shrouding strip used with end-tightened blading does away with the necessity for lacing strips except on the long blades in the exhaust end. The end-tightened device is not carried right through, and the low-pressure blading is the caulked-laced type.

These lacing strips are inserted at the inlet edge of the blades. On

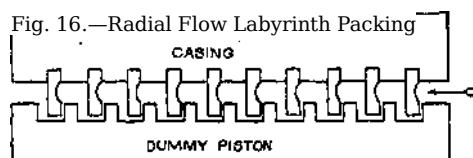


Fig. 16.—Radial Flow Labyrinth Packing

the longest blades two or even three may have to be used, but the tendency now is to make tandem machin

es for
larger
outputs

, having
a
double
flow
at the
exhaus
t end,
and
thus
cut
down
the
blade
lengths
and
rotor
di-
ameter
s which
would
otherwi
se need
special
precau
tions
for
stiffeni
ng.

As will be seen by referring to fig. n, the blades in the low-pressure end are mounted on discs, formed out of the body of the rotor forging. The blading is thinned at the tips, and the edges of the shrouding in the high-pressure portion, which may come in contact, can only touch along a thinned edge. Moreover, this end-tightened blading, if it touches at all, comes in contact with the spacing blocks which project above the groove for that purpose, and does not come in contact with the more